

## ABSTRACT OF THE DISCLOSURE

The invention provides a method of providing a volumetric representation of a three-dimensional object. The method comprises several steps, including obtaining a line list of points of at least one set of lines having start and end points corresponding to intersection of the lines with object boundary positions and obtaining an approximate volumetric representation of the object. Then, a modified volumetric representation is produced by modifying the approximate volumetric representation based on the start and end points of the set of lines and the approximate volumetric representation. The resultant modified volumetric representation of the object is more accurate than the approximate volumetric representation of the object. Also, a resultant data set from the present invention that defines the volumetric representation of the object contains continuous data as to the shape of the object, rather than mere discrete data. Therefore, the resultant data set contains more realistic data defining the object.